

## AAHC MAR 2006 REPORT

## UNITED STATES COMMENTS

## CHAPTER 1.1.1.

## ANIMAL WELFARE DEFINITIONS

For the purposes of the *Aquatic Code*, the following definitions apply:

- **Anaesthesia** means a state whereby an *aquatic animal* is insensitive to sensory inputs.

**Comment:** The United States believes that a more detailed and discriminating definition for ‘anesthesia’ is warranted. For the purposes of evaluating drug claims in aquatic species, the US Food & Drug Administration /Center for Veterinary Medicine distinguishes between sedation and anesthesia, reserving the term “anesthesia” to mean surgical anesthesia, and “sedation” to describe a loss of consciousness and perception to a lesser degree. Depending on dose and duration, the same compound may be labeled for sedation for either short term management procedures (tagging, marking) or “rested harvesting”; or for anesthesia for surgical purposes or potentially euthanasia. This might be a consideration as drugs become labeled for different purposes; for example, a dose and duration for sedation would not be adequate to induce a plane of anesthesia whereby surgical techniques could be performed without causing undue or avoidable noxious stimuli.

**Suggested definition:** **Anesthesia** means a gradation, progression or continuum of increasing insensitivity to noxious stimuli, including pain, achieved through means of exposure to anesthetic agents. Stages range from sedation to complete loss of response to stimuli.

- **Aquatic animal carcass** means the body/trunk of an *aquatic animal* subsequent to killing or death that requires safe disposal.

**Comment:** Because the term ‘safe disposal’ is somewhat ambiguous, and not necessarily the only application of an aquatic animal’s post-mortem remains, the United States recommends revising this definition to read:

**Aquatic animal carcass** means the body/trunk of an aquatic animal subsequent to killing or death that requires appropriate processing and utilization, or proper disposal.

- **Aquatic animal offal/waste** means the whole or parts of an *aquatic animal* and *aquatic animal products* not approved for human consumption including sludge and sieve material collected during slaughtering.
- **Aquatic animal technician** means a person with knowledge regarding the behaviour and needs of live *aquatic animals* which, with appropriate experience and a professional and

positive response to the welfare requirements of *aquatic animals*, results in effective management and good welfare. Their competence should be demonstrated through independent assessment and certification.

The United States recommends revising this definition to read:

**Aquatic animal technician** means a person with knowledge regarding the behaviour and needs of live aquatic animals; and who, based on appropriate experience and understanding of the health and husbandry requirements of aquatic animals, influences effective management with consideration for the welfare of aquatic animals in their care. Aquatic animal technician competence should be demonstrated through independent assessment and certification.

- **Aquatic animals for killing** means *aquatic animals* that are killed on site or transported to a suitable location for killing, for disease control purposes.
- **Boat** means a *vessel* constructed or adapted for the transport or temporary holding on water of live *aquatic animals* and their products, and includes well-boats, barges, and boats with tanks on deck.
- **Crustaceans** means crabs, crayfish, lobsters, prawns and shrimps.
- **Death** means irreversible loss of brain activity in fish, and demonstrable loss of sensation in crustaceans.

Since brain activity and sensation ability are difficult to measure or quantify in and of themselves, the United States recommends revising this definition to read:

**Death** means irreversible loss of brain activity in fish as evidenced through absolute and sustained loss of responsiveness to all stimuli; and through demonstrable loss of responsiveness to all stimuli in crustaceans.

- **Fish** means live freshwater, estuarine or seawater finfish of any kind.

For precision, the United States recommends the alternative and consistent use of 'finfish' to replace 'fish' in the Code; finfish could be defined as follows:

**Finfish** means live freshwater, estuarine or seawater vertebrate fishes belonging to the classes *Agnatha* and *Osteichthyes*, and cartilaginous fish of the class *Chondrichthyes*.

- **Harvest** means the removal of *fish* from their environment for human consumption.
- **Humane killing** means either immediate death, or death preceded either by immediate unconsciousness or by unconsciousness induced without pain, fear or adverse behaviour.

**Comment:** The United States recommends that this definition be delayed for inclusion pending further discussion. The term 'humane killing' is not limited to aquatic animals as presented. The United States also does not support defining 'humane killing' in terms of including references to

pain or fear in the definition, since these phenomena have not been adequately assessed or reliably demonstrated through rigorous scientific studies in most species of aquatic animals.

- **Killing** means any procedure which causes the death of an *aquatic animal*.
- **Mass destruction** means an emergency destruction and disposal of a population of *aquatic animals* for disposal.

The United States recommends revising the definition to read:

**Mass destruction** means an emergency destruction and disposal of a population of *aquatic animals*, with or without anaesthesia, for disposal.

- **Slaughtering** means the killing and/or processing of *fish*, with or without sedation/bleeding, for human consumption.

The United States recommends revising the definition to read:

**Slaughtering** means the killing and/or processing of *fish*, with or without anesthesia, for human or animal consumption.

- **Stocking density** means, in the case of *aquatic animals*, the number or body weight of *aquatic animals* per unit area or per unit volume of water on a *vehicle* or a tank.

The US recommends revising the definition to read:

**Stocking density** means, in the case of aquatic animals, the biomass of animals per unit volume in a controlled environment such as a tank, net-pen or transport vehicle.

- **Stunning** means any mechanical, electrical, chemical or other procedure which causes the loss of consciousness which lasts until death.

The United States recommends revising the definition to read:

**Stunning** means any mechanical, electrical, chemical or other procedure which causes the complete loss of responsiveness to external stimuli in an aquatic animal, until death ensues.

- **Transport equipment** means the compartment in which live *aquatic animals* and transporting water are kept during transport (buckets, cylinders, tanks, wells, etc.), and associated equipment such as water circulation devices, pumps, water treatment equipment, water filtration devices and systems for loading and unloading live fish, valves, tubes and pipelines.
- **Transport unit** means the combination of the transport equipment and the *vehicle/vessel*.
- **Travel means** the movement of a *vehicle/vessel* or container carrying live *aquatic animals* from one location to another.

- **Vehicle/vessel** means any train, truck, automobile, airplane, helicopter or *boat* that is used for the transport of live *aquatic animals*.
- **Visual evoked response (VER)** means test that evaluates the conduction of electrical impulses from the optic nerve to the occipital cortex of the brain.

**Note:** Insert an 'a' before 'test'

- **Water quality parameters** means its physical, chemical and biological characteristics.

The United States recommends revising the definition to read:

**Water quality parameters** means the physical, chemical and biological characteristics of water.

In addition to the above revisions, the United States recommends including other definitions for terms that are referenced throughout the *Code*. These include the following terms and accompanying suggested definitions:

- **Exsanguination** means the action or process of draining or otherwise losing blood.
- **Pithing** means to sever or destroy the spinal cord of an aquatic animal, usually by inserting a needle or knife into the vertebral canal.
- **Stress** means quantifiable and measurable factors influencing the physiological processes of an aquatic animal.